EXECUTIVE SUMMARY

LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD
WATERSHED MANAGEMENT INITIATIVE CHAPTER
December 2001

OVERVIEW

Water resource protection efforts of the State Water Resources Control Board and the Regional Water Quality Control Boards are guided by a five year Strategic Plan (currently being updated). A key component of the Strategic Plan is to utilize a watershed management approach for water resources protection.

To protect water resources within a watershed context, a mix of point and nonpoint source discharges, ground and surface water interactions, and water quality/water quantity relationships must be considered. These complex relationships present considerable challenges to water resource protection programs. The State and Regional Boards are responding to these challenges within the context of our organization's Watershed Management Initiative (WMI). The WMI is designed to integrate various surface and ground water regulatory programs while promoting cooperative, collaborative efforts within a watershed. It is also designed to focus limited resources on key issues and use sound science.

Previously, State and Regional Board programs tended to be directed at site-specific problems. This approach was reasonably effective for controlling pollution from point sources. However, with diffuse nonpoint sources of pollutants, a new regulatory strategy was needed. The WMI uses a strategy to draw solutions from all interested parties within a watershed, and to more effectively coordinate and implement measures to control both point and nonpoint sources.

For the initial implementation of the WMI, during the late 1990s, each Regional Board identified the watersheds in their Region, prioritized water quality issues, and developed watershed management strategies. These strategies and the State Board's overall coordinating approach to WMI are contained in the *Integrated Plan for Implementation of the WMI* which is updated annually. In following years, the Regional Boards have continued to build upon their early efforts to utilize this approach. The full version of our WMI Chapter outlines our ongoing efforts to continue implementation of the WMI.

The Los Angeles Regional Board and Watershed Management

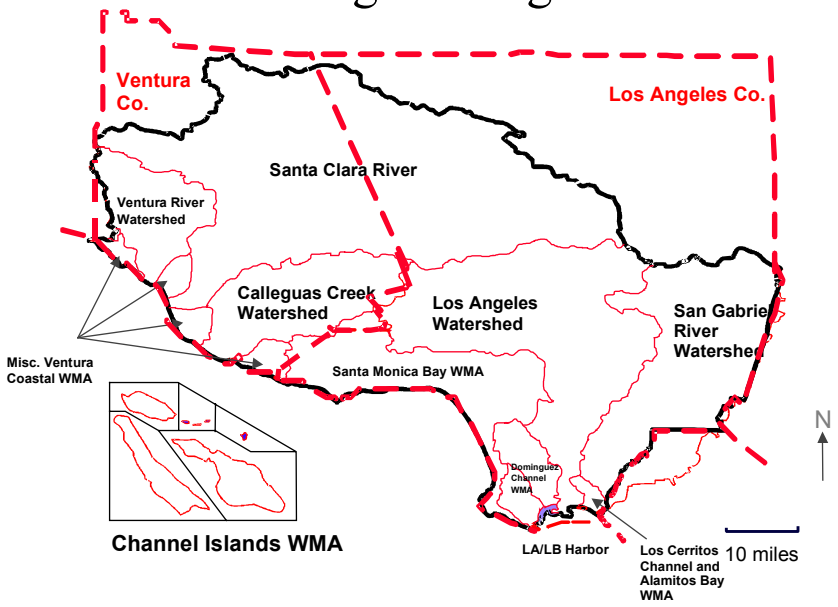
The Los Angeles Region has jurisdiction over all coastal drainages flowing to the Pacific Ocean between Rincon Point (on the coast in western Ventura County) and the eastern Los Angeles County line, as well as the drainages of five coastal islands (Anacapa, San Nicolas, Santa Barbara, Santa Catalina, and San Clemente). The Regional Board's jurisdiction also includes all coastal waters within three miles of the continental and island coastlines.

The Los Angeles Region is the State's most densely populated and industrialized region. Over 1,000 discharges of wastewater from point sources in this Region are regulated by the Los Angeles Regional Board. Over 700 of these point source discharges are discharged to surface waters, and are regulated under the National Pollutant Discharge Elimination System (NPDES). In addition, the Regional Board prescribes Waste Discharge Requirements (WDRs) for the remaining discharges, which are primarily to ground waters and landfills. However, the quality of many waters continue to be degraded from pollutants discharged from diffuse and diverse nonpoint sources. Future success in reducing pollutants from nonpoint sources and achieving additional reductions in pollutants from point sources requires a shift to a more geographically-targeted approach.

Our watershed management approach integrates activities across the Regional Board's many diverse programs, particularly permitting, planning, and other surface-water oriented programs which have tended to operate somewhat independent of each other. This approach enables us to better assess cumulative impacts of pollutants from all (point and nonpoint) sources, and more efficiently develop watershed-specific solutions that balance the environmental and economic impacts of our actions.

We have designated ten watershed management areas in the Los Angeles Region as shown in the figure below.

Watershed Management Areas of the Los Angeles Region



Initially, implementation of watershed management in the Los Angeles Region occurred in phases over a seven-year cycle for our pilot watersheds Ventura River and Calleguas Creek. We are now shifting to a five-year cycle to be in line with the standard permit life (of an NPDES permit) and to equalize workloads over the years. This shift in our watershed cycle is illustrated in the table on the next page. The majority of permit-related tasks such as permit renewals/revisions and regional monitoring program development as well as preparation of state of watershed reports, will occur during the first approximately twelve months of the watershed's five-year cycle. Much of the rest of the five-year cycle will be spent developing and implementing, with the input of stakeholders, measures for management of more complex pollutants from point and/or nonpoint sources. Many of the region's TMDLs will be implemented during the second cycle of permit renewals.

It should be pointed out that the involvement of stakeholders is critical to the success of watershed management; however, the process to involve stakeholders demands more of regulators in terms of public outreach, education, and consensus building.

Permit Timeline for Watershed Management Initiative

Dominguez Channel-LA/LB Harbor	FY 2002/03
Santa Monica Bay	FY 2003/04
Los Angeles River	FY 2004/05
San Gabriel River Los Cerritos Channel Channel Islands	FY 2005/06
Ventura River Misc. Ventura Coastal Santa Clara River Calleguas Creek	FY 2006/07
Dominguez Channel-LA/LB Harbor	FY 2007/08

NPDES permits in the Los Angeles Region are organized and scheduled by watershed. This workload must be integrated with that required under backlog reduction efforts or other regulatory or legislative requirements. Preliminary "State of the Watershed Reports" are prepared by watershed "teams" composed of permit writers, planning, TMDL, and nonpoint source program personnel, and those involved with groundwater protection.

The Watershed Management Initiative Chapter

This document is the sixth iteration of what we call our "Chapter" which is our Region's chapter of the WMI document for the whole state. The participants in implementation of the WMI in California (the nine Regional Boards, State Board, and USEPA) were asked in 1996 to begin preparation of a document which identified priorities and resource needs, across programs, in a watershed context. The Chapter is currently used both as an outreach and as a planning tool to identify the Region's priorities over the upcoming two fiscal years (FYs) and where we should spend our baseline resources, as well as where we need additional resources. The Chapter is organized into sections including the Introduction, Watershed Sections, and Region-wide Section. Included in each Watershed Section is an overview of that watershed, a description of its water quality concerns and issues, past significant Regional Board activities in the watershed, current (funded) activities, near-term (usually unfunded) activities that would benefit the watershed, and activities which may happen on a longer time-scale (usually unfunded). The Region-wide Section includes a description of activities not easily associated with particular watersheds.

Programs and Funding Under WMI

Programs covered under WMI include core regulatory (e.g., NPDES), monitoring and assessment, basin planning and water quality standards, watershed management, wetlands, TMDLs, 401 certifications, groundwater (as appropriate), and nonpoint source management activities (many of these programs also have region-wide components). It turns out most of our highest priority needs fall into areas that have little to no funding. **Areas with particular shortages include nonpoint source management (e.g., we see a need for an additional 14.0 PYs for FY02/03)**, CEQA review, monitoring and assessment, basin planning, **401 certifications (the statewide needs analysis from FY 00/01 indicated a shortfall of 13.9 PYs which is unchanged for FY02/03)**, stormwater, and more than minimal work on NPDES pretreatment, enforcement, compliance, and monitoring report review. A majority of any additional monies that may become available would be dedicated to these programs in the targeted watersheds (then non-targeted watersheds) as well as allocated to upcoming TMDLs occurring throughout the Region. **For example, in FY02/03, we see a need for an additional 8.8 PYs to conduct TMDL work**. This watershed effort, which itself has consumed a lot of limited staff resources, will hopefully result in resource flexibility and augmentation to address these deficiencies. Staff funding for participation in the Los Angeles Contaminated Sediments Task Force will end in June 2002. In FY 02/03 and 03/04, we see a need for an additional 2.0 PYs to conduct CSTF work.

Integration of Multiple Mandates Under WMI

While the Watershed Management Initiative strives to integrate and coordinate the various Regional and State Board programs and address the highest priority funding needs for those programs, there is also need to respond to and accommodate priorities established by the individual Regional and State Boards' members, priorities established prior to the WMI which run on their own timelines, legal or legislative mandates, or other new mandates which may affect the way the WMI is implemented in a Region. It is important to re-state here that the WMI is not a new program but rather a way to describe our approach to integrating existing and newly evolving programs and mandates.

For example, a high priority statewide mandate is management of nonpoint source pollution. High priority Regional Board activities include implementation of an effective enforcement strategy, development of a septic tank policy initiative, development and implementation of a strategy to assess nonpoint source loadings, TMDLs, and better communication and coordination of Board programs and policies through improved outreach. More information is included in the Introduction of the full chapter. It is clear many of the Regional Board high priority activities are of primary importance in fulfilling not only the WMI but also the nonpoint source management initiative and other mandates.

However, some mandates present challenges to fully implementing watershed management. These include recent USEPA, State Board, and legislative requirements for reducing permit backlog, conflicts with the timing of scheduled TMDLs, lengthy delays incurred by the public processes e.g., hearings, workshops), ands insufficient funding or staff.

SUMMARY OF SIGNIFICANT WATERSHED ISSUES

The Region encompasses ten Watershed Management Areas (WMAs) which are the geographically-defined watershed areas where the Regional Board implements the watershed approach. These generally involve a single large watershed, within which exists smaller subwatersheds. However, in some cases they may be an area that does not meet the strict hydrologic definition of a watershed (e.g., several small Ventura coastal waterbodies in the region are grouped together into one WMA). Watersheds in the strictest sense are geographic areas draining into a river system, ocean or other body of water through a single outlet and includes the receiving waters. They are usually bordered, and separated from other watersheds, by mountain ridges or other naturally elevated areas.

Many of the watersheds in this Region range over large areas that are highly diverse. A Designated Wilderness Area may occur in one part of a watershed while extensive development dominates another part and possibly agriculture in yet different area of the watershed. This fact results in a great diversity of issues of concern to this agency in any particular watershed with the concomitant need to balance priorities among existing stakeholders. The following summarizes significant watershed issues in our watershed management areas. More detail may be found by consulting the full version of the WMI Chapter.

1) Dominguez Channel/LA-LB Harbor WMA

- Ten major discharges: one POTW, two generating stations, six refineries
- 58 minor permits
- 62 discharges covered by general permits
- Industrial storm water – 424 discharges
- Construction storm water – 115 discharges
- Historical deposits of DDT and PCBs in sediment
- Discharges from POTW & refineries
- Spills from ships and industrial facilities
- Leaching of contaminated groundwater
- Stormwater runoff
- Impairments: metals, PCBs, PAHs, historic pesticides, coliform, trash, nitrogen
- Currently scheduled TMDLs: coliform FY02/03

2) Santa Monica Bay WMA

- Key recreational resource (beaches)
- Three POTWs, one refinery, and three generating stations
- 23 minor discharges
- 166 discharges covered by general permits
- Industrial storm water – 103 discharges
- Construction storm water – 113 discharges
- Impairments: mercury, selenium, other metals, historical pesticides, PAHs, PCBs, nitrogen, coliform, trash, TBT, habitat alteration, exotic vegetation, salts

Coastline

- Acute health risk associated with swimming in runoff-contaminated surfzone waters
- Chronic risk associated with consumption of seafood in areas impacted by DDT and PCB contamination
- Reduction of loadings from the two major POTWs in light of projected population increases
- Other impacts from urban runoff/storm water
- Historic deposits of DDT and PCBs in sediment
- Loadings of pollutants from other sources: sediment resuspension, atmospheric deposition
- The need to have a better understanding of the Bay's resources
- Currently scheduled TMDLs: coliform FY01/02; metals FY04/05 and 06/07; chlordane FY05/06

Malibu Creek Watershed

- Excessive freshwater, nutrients, and coliform in lagoon; contributions from POTW and other sources
- Urban runoff from upper watershed
- Impacts to swimmers/surfers from lagoon water
- Septic tanks in lower watershed
- Appropriate restoration and management of lagoon
- Access to creek and lagoon by endangered fish
- Currently scheduled TMDLs: nutrients and coliform FY01/02, trash FY06/07

Ballona Creek Watershed

- Trash loading from creek
- Wetlands restoration
- Sediment contamination by heavy metals from creek to Marina del Rey Harbor and offshore)
- Sediment contamination by heavy metals and trace organics within Ballona Creek Entrance Channel
- Toxicity of both dry weather and storm runoff in creek
- High bacterial indicators at mouth of creek
- Currently scheduled TMDLs: trash FY01/02, coliform FY03/04, PCBs and pesticides FY03/04 and 04/05, metals FY03/04

3) Los Angeles River Watershed

- Seven major NPDES discharges (four POTWs)
- 30 minor permits
- 110 discharges covered by general permits
- Industrial storm water – 1,307 discharges
- Construction storm water - 204 discharges
- Nitrogen and coliform contributions from septic systems
- Other nonpoint sources (horse stables, golf courses)
- Cross-contamination between surface and groundwater
- Protection and enhancement of fish and wildlife habitat and recreational areas
- Removal of exotic vegetation
- Balancing removal of vegetation for flood control with the need for urban habitat
- Attaining a balance between water reclamation and minimum flows to support habitat
- leakage of MTBE from underground storage tanks
- Contaminated sediments within the LA River estuary
- Impairments: nitrogen, trash, selenium, other metals, coliform, PCBs, historic pesticides, chlorpyrifos
- Currently scheduled TMDLs: trash 01/02, nitrogen and coliform FY01/02, metals FY03/04, historic pesticide FY05/06

4) San Gabriel River Watershed

- Ten major NPDES discharges (five POTWs)
- 24 minor permits
- 75 discharges covered under general permits
- 534 discharges covered by the industrial storm water permit
- 121 discharges covered by the construction storm water permit
- Sluicing and disposal of sediments from reservoirs
- Protection of groundwater recharge areas
- Ambient toxicity
- Excessive trash in recreational areas of upper watershed
- Mining/stream modifications
- Extensive stream modification for mining and water reclamation
- Urban and storm water runoff quality
- Nonpoint source loadings from nurseries and horse stables
- Lack of understanding of estuary dynamics (e.g. salinity profile)
- Septic systems
- Impairments: nitrogen and effects, trash, metals, historic pesticides, coliform, chlorides, PCBs
- Currently scheduled TMDLs: trash (completed), nitrogen and metals (river) FY04/05; coliform FY02/03; nitrogen (lakes) FY03/04; PCBs & pest. and metals (lakes) FY05/06

5) Los Cerritos Channel/Alamitos Bay WMA

- Four minor discharges
- Eight discharges covered under general permits
- 17 discharges covered by the industrial storm water permit
- 15 discharges covered by the general construction storm water permit
- Loss of wetlands habitat in Los Cerritos area
- Impacts from antifouling paint in marinas
- Urban and storm water runoff impacts on isolated water bodies
- Loss of tidal exchange
- Impairments: ammonia, metals, historic pesticides and effects, PCBs, PAHs
- Currently scheduled TMDLs: coliform, ammonia, metals, PAHs, historic pesticides FY04/05

6) The Channel Islands WMA

- Five islands
- One major discharger, four minor dischargers
- Six discharges covered by the industrial storm water permit
- One discharge covered by the construction storm water permit
- Areas offshore of islands designated as Areas of Special Biological Significance
- High quality marine and rocky intertidal habitat
- Heavy use by marine mammals and endangered species
- No known impairments
- Lack of information on water quality

7) Ventura River Watershed

- Eutrophication, especially in estuary
- TDS concerns in some subwatersheds
- One major discharge (POTW)
- Four discharges covered under general permits
- Industrial storm water – 21 discharges
- Construction storm water – four discharges
- Impediments (dams, diversions) to steelhead trout migration
- Impairments: DDT, algae, diversions, selenium, other metals, trash
- Currently scheduled TMDLs: eutrophication FY05/06

8) Miscellaneous Ventura Coastal WMA

- Three major, 13 minor, and 8 discharges under general NPDES permits
- Industrial storm water – 77 discharges
- Construction storm water – 46 discharges

The harbors

- Accumulation of metals, PCBs, and historic pesticides in sediment and tissue
- Considerable marine life subject to impacts
- Impairments: DDT, PCBs, PAHs, metals, TBT, coliform
- Currently scheduled TMDLs: zinc FY04/05; coliform, pesticides, and PAHs FY06/07

The wetlands and coast

- Historic pesticide contamination
- Loss of quality habitat
- Impacts from oil spills and agriculture
- Use by endangered species
- Impairments: historic pesticides and effects, coliform
- Currently scheduled TMDLs: coliform FY02/03; pesticides FY06/07

9) Santa Clara River Watershed

- High quality natural resource
- Four major NPDES discharges (POTWs)
- 13 minor discharges
- 30 discharges covered under general permits
- Industrial storm water – 72 dischargers
- Construction storm water – 188 dischargers
- Impacts from exotic vegetation
- Impacts from agriculture
- Increasing urbanization, flows, and channelization in upper watershed; impacts on middle and lower watershed
- Impairments: nitrogen and effects, salts, coliform, trash, historic pesticides
- Currently scheduled TMDLs: chloride FY01/02; nitrogen FY02/03, eutroph. and trash (lakes) FY04/05; coliform FY05/06; pesticides FY06/07

10) Calleguas Creek Watershed

- Six POTWs
- Three major discharges; nine minor discharges
- Ten discharges covered under general permits
- Industrial storm water – 55 dischargers
- Construction storm water – 151 dischargers
- Highly modified watershed
- Impacts from agriculture and naval facility
- Sediment inputs to Mugu Lagoon, one of the largest wetlands in southern California
- Competing urban uses; development pressures, particularly in upper watershed
- Severe lack of benthic and riparian habitat in watershed
- Impairments: nitrogen and effects, water-soluble pesticides and effects, salts, historic pesticides, PCBs, siltation, selenium, mercury, other metals, trash
- Currently scheduled TMDLs: chloride and nitrogen FY01/02; other salts and water-soluble pesticides FY03/04, PCBs and historic pesticides FY04/05, metals FY05/06

SUMMARY OF REGIONWIDE ACTIVITIES

There are many activities conducted at the Region which do not apply to a specific watershed; instead they represent ongoing regionwide strategies and policies, or programs which are not directly linked to the rotating watershed cycle. Also, statutory, regulatory, or funding requirements may dictate completion of some activities at odd intervals throughout the five-year watershed cycle (such as increased emphasis on pretreatment inspections). The table below gives examples of watershed versus non-watershed related activities.

Watershed Tasks	*Non-Watershed Tasks*
Renew permits	Issue new permits
	Develop new general permits, reduce backlog, pretreatment
Integrate municipal storm water program	Issue individual industrial and storm water permits
Conduct inspections for watershed permits	Conduct inspections on new permits
Enforcement (in-cycle compliance)	Enforcement (spills, out of cycle compliance)
Implement NPS controls	Develop regional strategies to address NPS problems
TMDL/WLAs	
Develop, coordinate and implement watershed monitoring	Coordinate monitoring on a regional scale
Water Quality Assessments (State of the Watershed Reports, partial updates to 305(b) by watershed)	Biennial 305(b) Reports to USEPA
Develop watershed policies	Develop regional policies
Watershed-specific Basin Plan Updates	Regional Basin Plan Updates, Triennial Reviews
Data management (input and use by watershed)	Regional Database management
GIS (input of watershed-specific layers and information)	GIS (development and input of regional layers and Maintenance of system)
Watershed-specific outreach/education	General outreach education
Incorporation of CEQA and 401 Decisions into watershed planning (as groups are formed, and as timing permits)	Timely review of CEQA documents, 401 certifications per statutory deadlines

While the Watershed Management Initiative strives to integrate and coordinate the various Regional and State Board programs and address the highest priority funding needs for those programs, there is also need to respond to and accommodate priorities established by the individual Regional and State Boards' members, priorities established prior to the WMI which run on their own timelines, or other new mandates which may affect the way the WMI is implemented in a Region. The following briefly describes our overall approach to implementing a subset of programs (some statewide mandates) and other Board priorities on a regionwide scale.

Core Regulatory – General Permits

There are many dischargers in this Region covered by general permits for discharges to surface water through a letter issued by the Executive Officer. This activity occurs independent of the watershed cycle as the need arises. Many of these are for short-term projects such as dewatering. 40 CFR §122.28 provides for issuance of general permits to regulate a category of point sources if the sources: a) involve the same or substantially similar types of operations, b) discharge the same type of waste, c) require the same type of effluent limitations or operating conditions, d) require similar monitoring, and e) are more appropriately regulated under a general permit rather than individual permits.

Core Regulatory – Storm Water Permits

Storm water activities include those involving the three municipal permits (and Standard Urban Storm Water Mitigation Plans associated with the two urban ones) in the Region, the approximately 2700 facilities regulated under the State's general industrial permit, and the approximately 950 construction sites regulated under the State's general construction permit.

Wetlands Protection and Management – Water Quality Certification

A key wetlands regulatory tool for the Regional Board is the CWA Section 401 Water Quality Certification Program which regulates discharges of dredge and fill materials to waters. The 401 certification program is one of the most effective tools the state has for regulating hydrologic modification projects, especially those which directly impact the region's diminishing acres of wetlands and riparian habitat.

Key program activities should include CEQA documents review/response, pre-construction meetings with applicants, site visits, application processing, follow-up monitoring and inspections, and enforcement. Unfortunately, the program is currently severely underfunded with only application processing being undertaken. **The program is currently funded at 2.1 PYs; the FY 00/01 statewide needs analysis for the 401 certification program indicated a needed augmentation of 13.9 PYs which is unchanged for FY02/03.**

Approximately 150-200 applications are processed each year. Information about projects and the program in general is available on the Regional Board website at http://www.swrcb.ca.gov/rwqcb4/.

Management of Nonpoint Source Pollution

California's Nonpoint Source (NPS) Pollution Control Program has been in effect since 1988; it has recently been updated (January 2000). A key element of the Program is the "Three-Tiered Approach," through which self-determined implementation is favored, but more stringent regulatory authorities are utilized when necessary to achieve implementation.

Our long-term goal for the NPS program is to improve water quality by implementing the management measures identified in *the California Management Measures for Polluted Runoff Report (CAMMPR)* by 2013.

Major current nonpoint source program priorities are: 1) oversight of workplans for 319(h) and Proposition 13 projects, 2) establishment of regional strategies to address agriculture, marinas, and septic tanks (the latter will be focused on densely populated communities and areas where ground water is a source of drinking water), 3) investigation of loading contributions from agriculture, nurseries, golf course, and horse stables (in aid of TMDL work), and 4) expansion of our public education and outreach. It is anticipated our nonpoint source program implementation will heavily emphasize Tier 1, at least initially. **We see a need for an additional 14.0 PYs to fully implement our priorities.**

Enforcement Strategy

The statewide Water Quality Enforcement Policy adopted by State Board in 1996 is intended to make all enforcement consistent, predictable, and fair throughout the state. The Regional Board adopted a resolution in 1997 which confirmed the Regional Board's desire to carry out enforcement in a manner consistent with State Board's enforcement policy and that Regional Board staff prepare a regional enforcement strategy consistent with State Board's enforcement policy. The statewide enforcement policy is currently in the process of being revised.

The enforcement policy states that the Regional Board staff must bring to the attention of their Regional Board for possible enforcement action, at a minimum, an array of permit violations for a variety of

dischargers as well as failure to submit reports or deficient reports, and spills. Our increased efforts have resulted in an improved enforcement record for the region and has contributed to increased compliance in some programs (e.g. industrial stormwater). The quarterly violations report is available to the public as part of the Executive Officer's Report; and is also available on the Board's web page.

Beaches/Coastal Watersheds Activities

Due to the great resource and economic value associated with the beaches and coastal watersheds of this Region, a number of activities occur that are specific to the coastal areas. Among these are a number of monitoring programs as well as a program to manage contaminated sediments. Monitoring programs include: several regional surveys of the Southern California Bight which evaluated a number of constituents to determine the spatial extent and magnitude of ecological disturbances, trend monitoring conducted through the State Mussel Watch and Toxic Substances Monitoring Programs, the recently formed Surface Water Ambient Monitoring Program (SWAMP), and assessment of seafood consumption health risks for recreational anglers through the Coastal Fish Contamination Program (CFCP).

Additionally, a Contaminated Sediments Task Force has been established to develop a long-term strategy to manage contaminated sediments found in the ports and marinas of Los Angeles County. This five-year effort was funded by the Karnette bill (SB 671) beginning in FY97/98.

FOR ADDITIONAL INFORMATION

Contact the Regional Board's Watershed Coordinator, Shirley Birosik, at (213) 576-6679 or sbirosik@rb4.swrcb.ca.gov for additional information or consult the Regional Board's website at http://www.swrcb.ca.gov/rwqcb4.